

Claims 2-7 depend from allowable claim 1 and claims 9-14 depend from allowable claim 8. Claims 3, 4, 10 and 11 have additional structure not disclosed in Taniguchi, as described in paragraph 5, 6 herein. Therefore, reconsideration and withdrawal of the rejection of claims 1-14 as anticipated by Taniguchi is respectfully requested.

5,6. Claims 4, 5, 11, 12, and 17-19 are rejected as obvious over Taniguchi.

Claims 4 and 1 depend from claims 3 and 10, respectfully, which require that the hydrophobic portion comprises a percentage of "a high structure carbon black" which is not disclosed in Taniguchi. Claims 4 and 11 additionally require "a low structure, high surface area carbon black", not disclosed in Taniguchi. Claims 5 and 12 depend from claims 4 and 11, respectfully, and are patentable for the same reasons. In addition, claims 4 and 5 depend from claim 1 and are patentable for the same reasons; claims 11 and 12 are patentable as depending from allowable claim 8.

Claims 17 and 19 require at least one "hydrophilic substrate layer having pores therein; a water transport plate adjacent to each said hydrophilic substrate layer." In Taniguchi, the only water plate is the coolant plate 110 which is next to a separator plate 20, 30 that has oxidant reactant gas channels in it: the cooling plates 110 are not adjacent to the current collectors 40, 41 - are not adjacent a "hydrophilic substrate layer having pores therein", as recited in claims 17 and 19.

The "water transport plates" of claims 17 and 19 are porous as indicated herein at column 5, lines 60-63. In Taniguchi, "the cooling plate 110 is also a substrate having high electrical conductivity." The term "also" is referring to "The separators 20 and 30 are dense substrates which are processed using carbon to give the separators high electrical conductivity." (Emphasis provided herein) These quotes are found in Taniguchi at column 4, lines 23-26, and column 8, lines 66, 67. It is not just a matter of combining the plate having water channels with the plate having coolant channels; it is necessary that the combined plate be porous, which is not taught in Taniguchi.

Claims 17 and 19 require "at least one of said support plates comprising a hydrophilic substrate layer having pores therein", which is not found in Taniguchi.

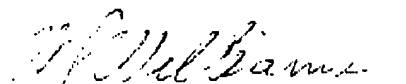
Claim 17 additionally requires "each said at least one support plate comprising a partially hydrophobic bilayer disposed between said hydrophilic substrate layer and said membrane electrode assembly", none of which is found in Taniguchi.

Claim 19 additionally requires that "each said one substrate layer having a porosity of between 65% and 75%". Taniguchi states "that the experiment fuel cells including current collectors of dense structures achieve higher effect for humidifying the polymer electrolyte membrane than the comparison fuel cell including a current collector of a sparse structure." (Emphasis supplied herein) This cannot possibly be said to meet the porosity requirements of claim 19.

Claim 18 depends from claim 17 and is patentable for the same reasons. For all the foregoing reasons, reconsideration and withdrawal of the rejection of claims 4, 5, 11, 12 and 17-19 as obvious over Taniguchi is hereby respectfully requested.

Should the foregoing not be persuasive in any respect, a telephone interview is most earnestly solicited.

Respectfully submitted,



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